

FIG. 1

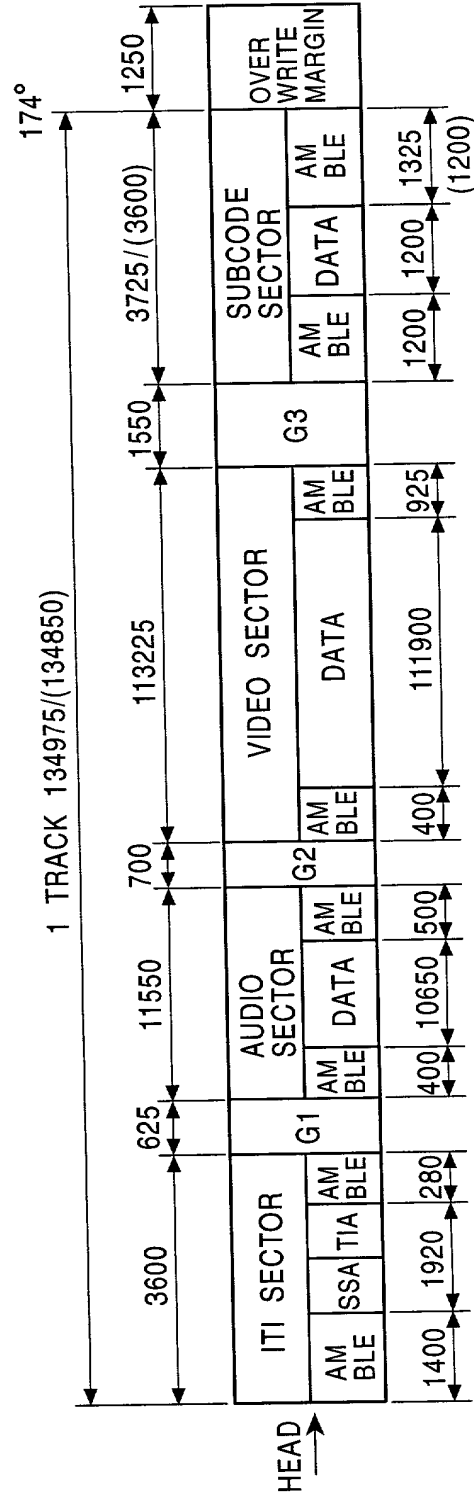


FIG. 2

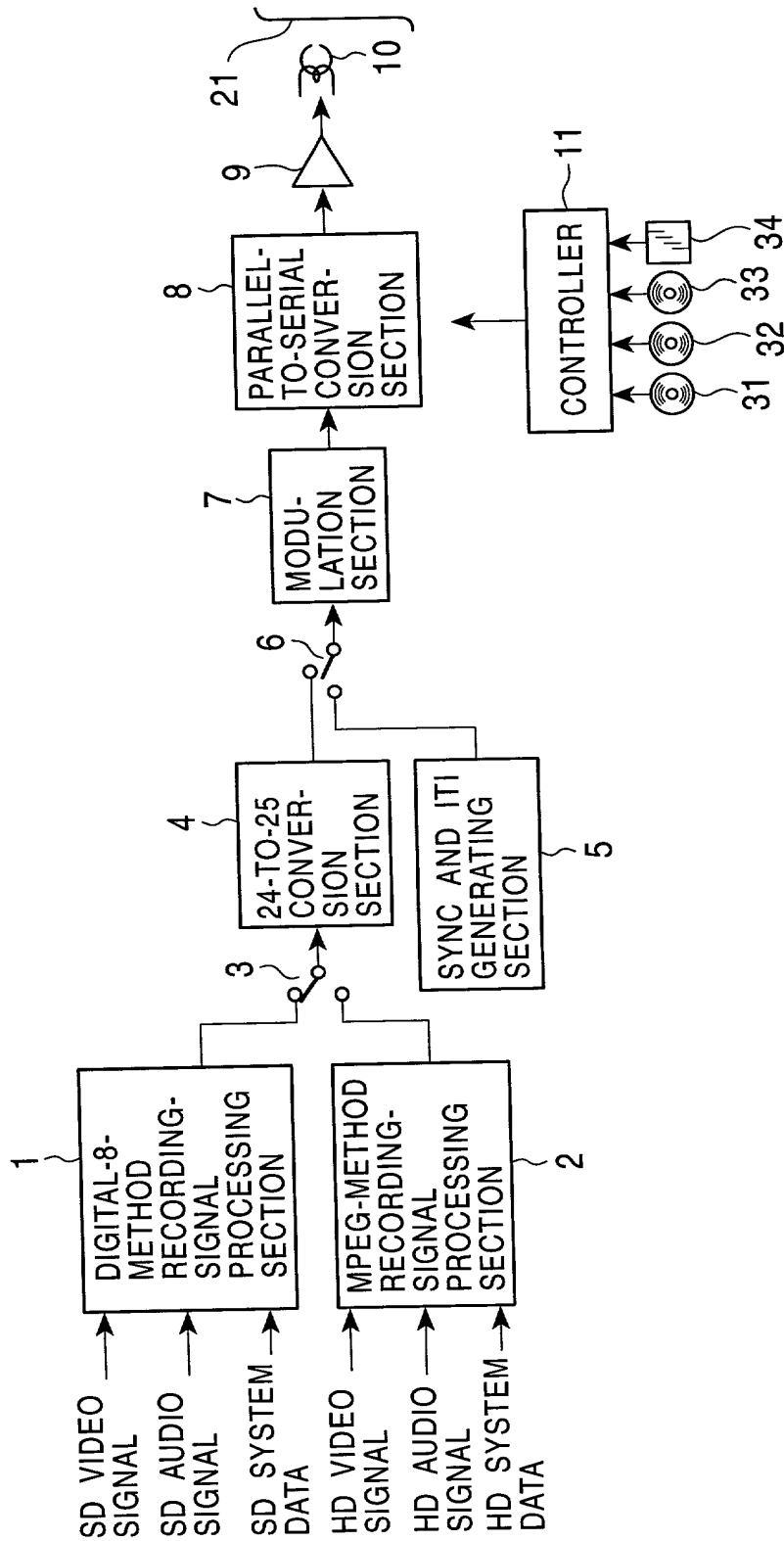


FIG. 3

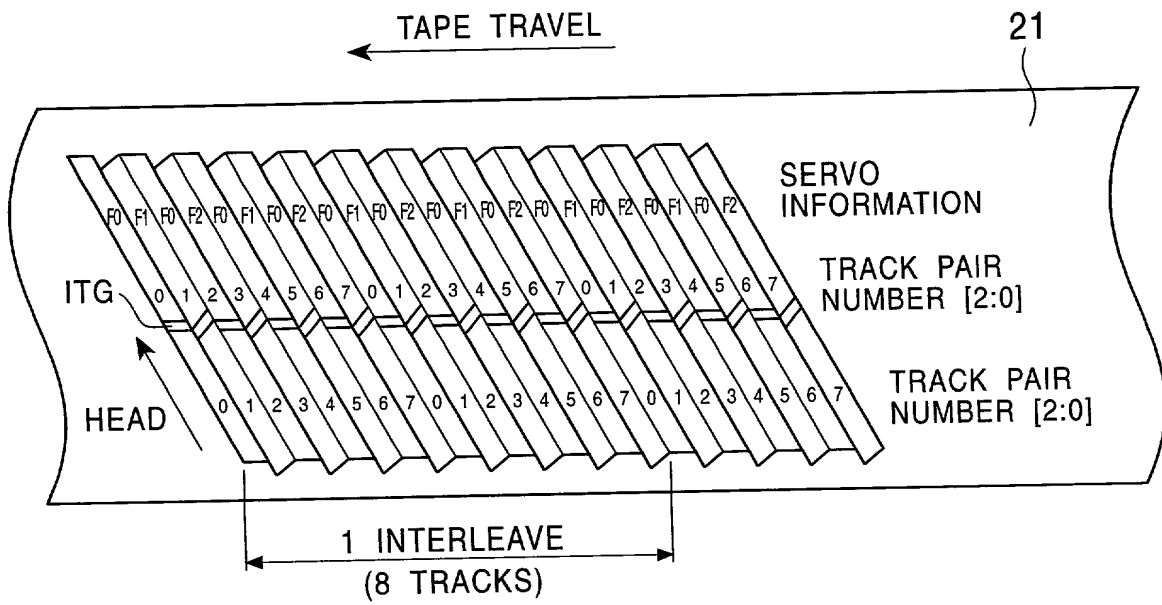


FIG. 4

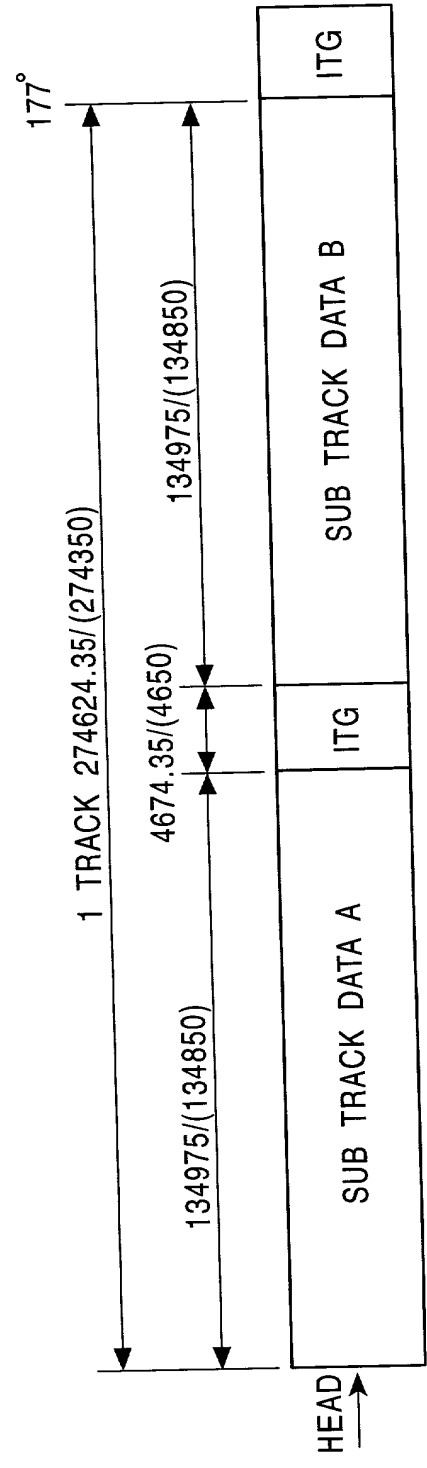


FIG. 5

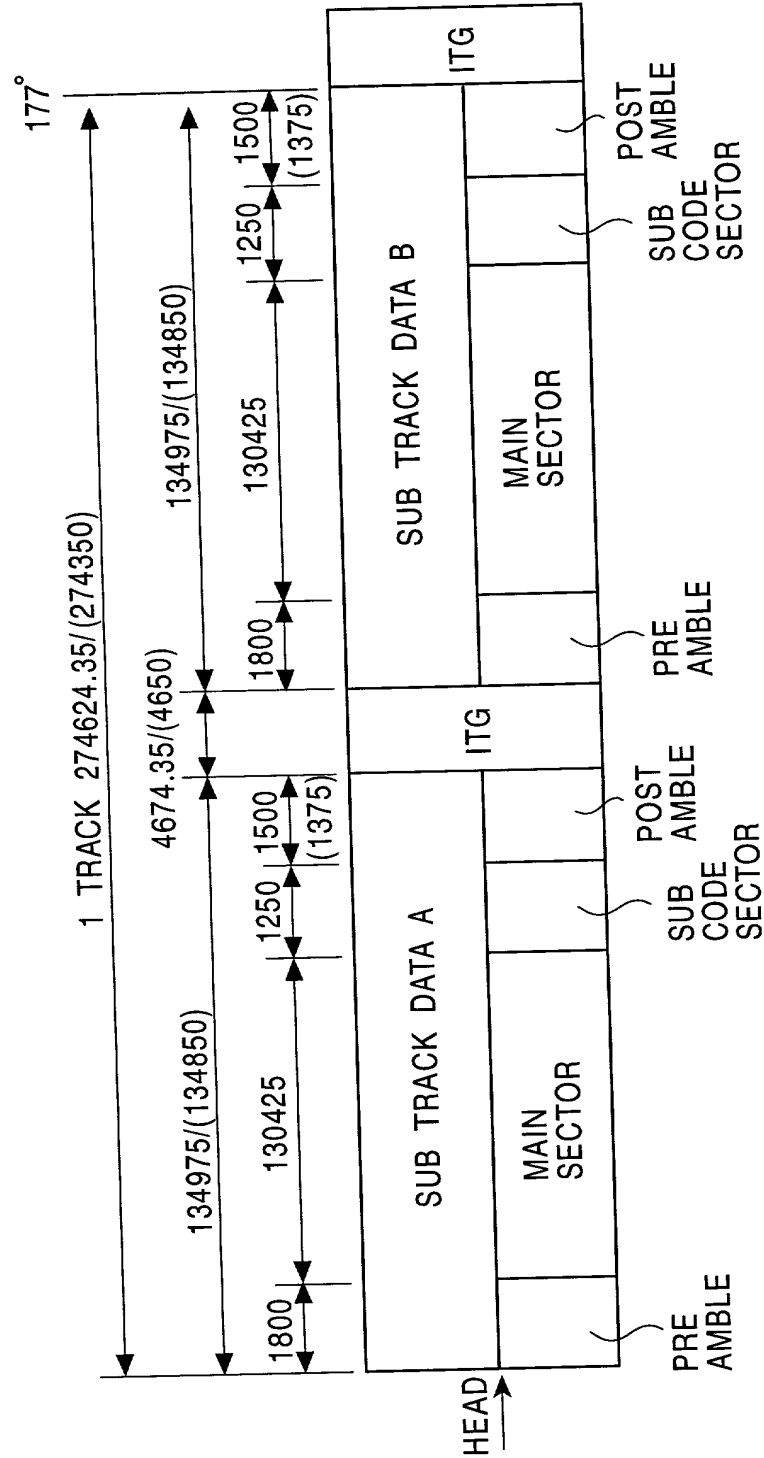


FIG. 6

RUN PATTERN	CODEWORD	
	MSB	LSB
PATTERN A	0001110001110000011100011	
PATTERN B	1110001110001111100011100	

FIG. 7

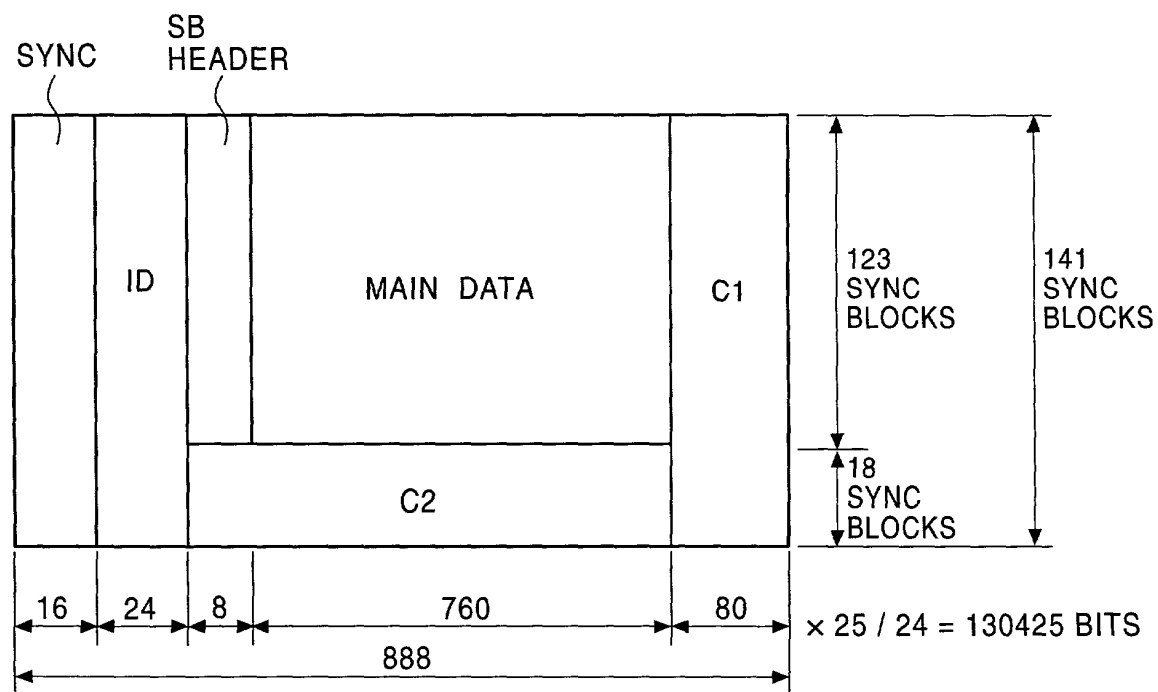


FIG. 8

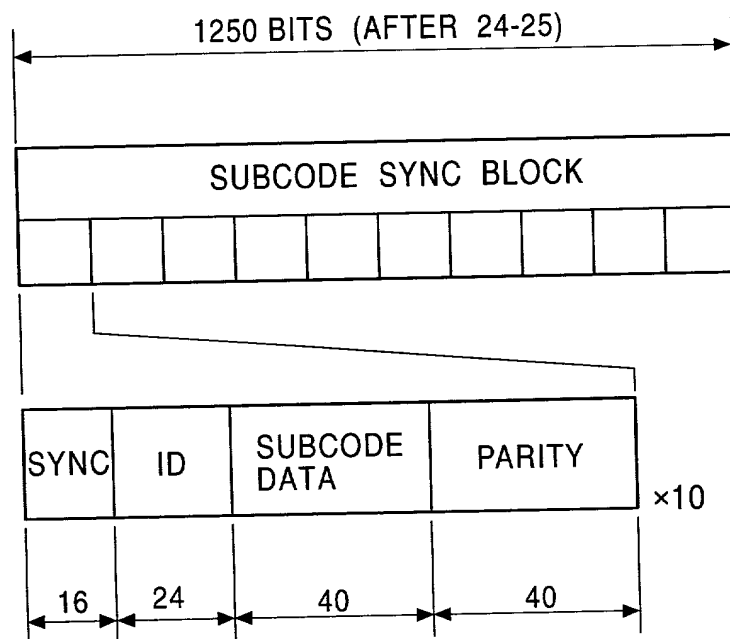


FIG. 9

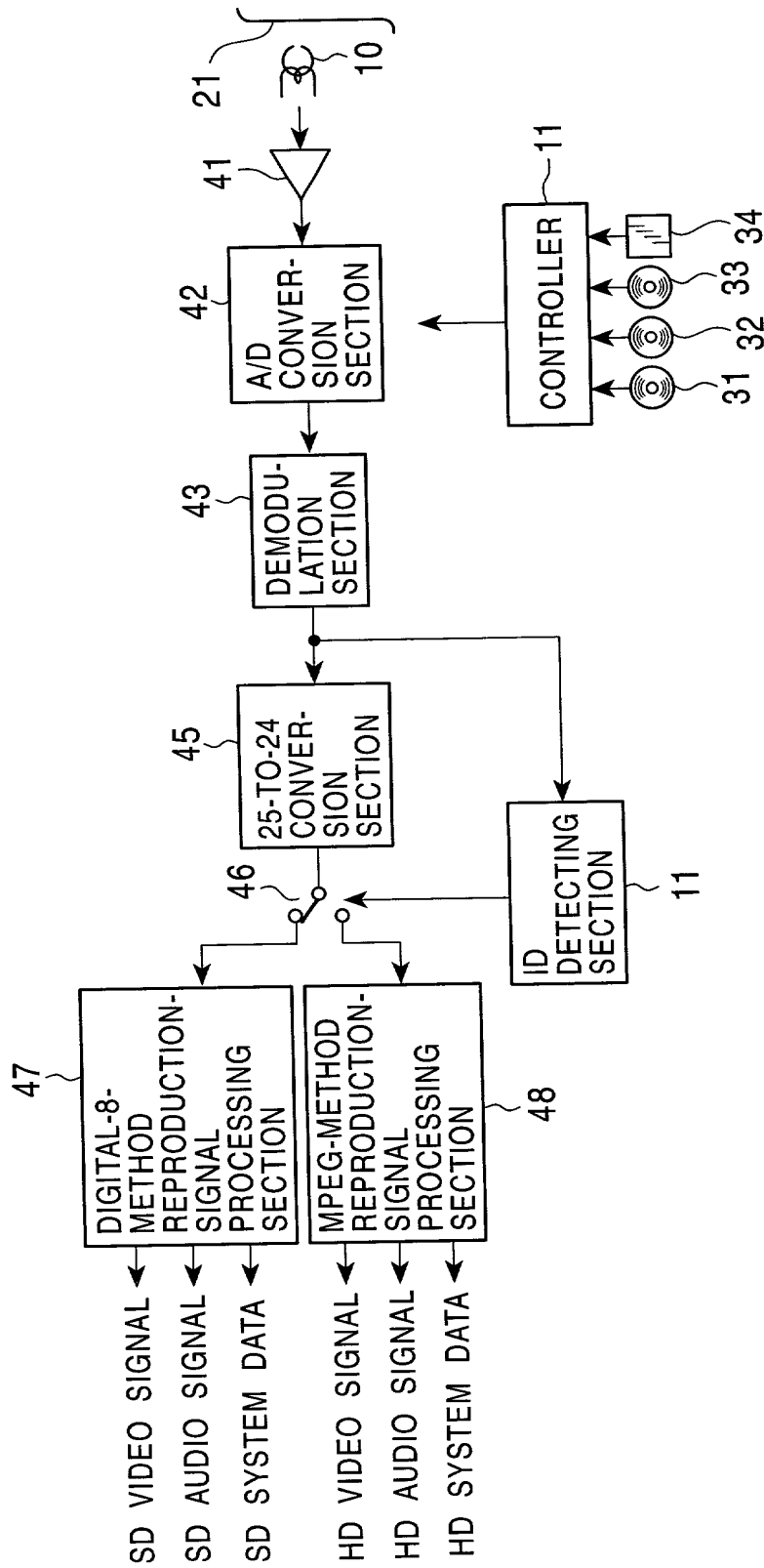


FIG. 10

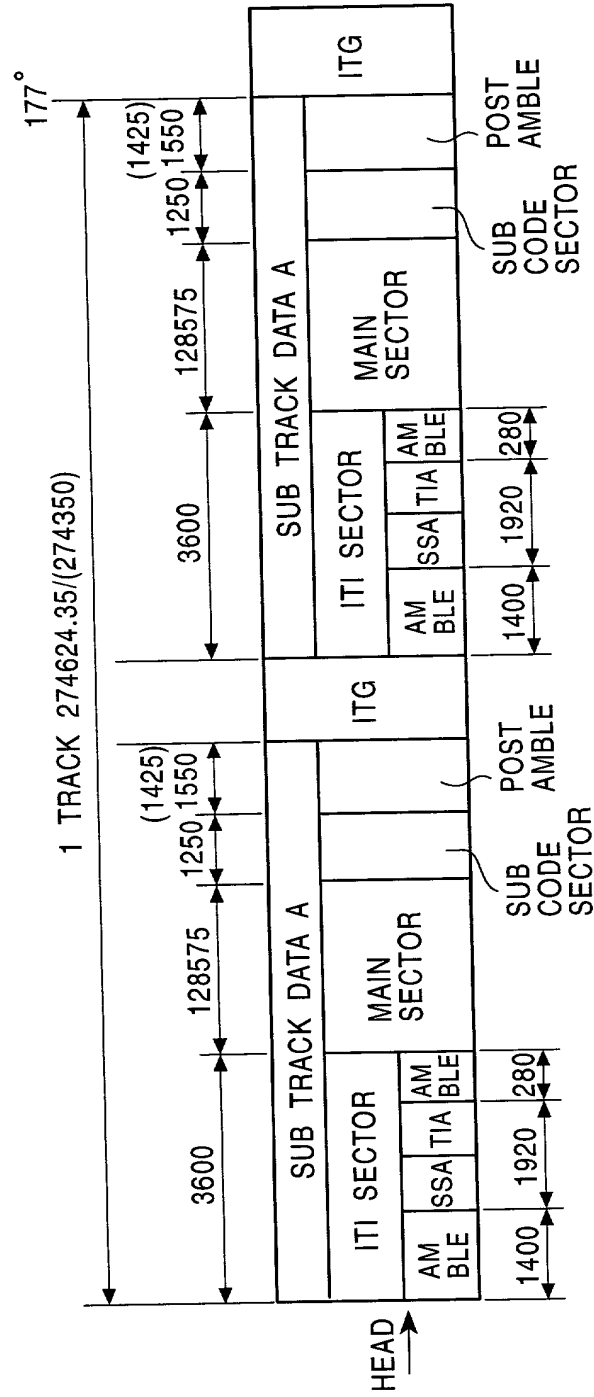


FIG. 11

ORDER OF RECORDING	CODEWORD		ORDER OF RECORDING	CODEWORD		ORDER OF RECORDING	CODEWORD		ORDER OF RECORDING	CODEWORD	
	MSB	LSB		MSB	LSB		MSB	LSB		MSB	LSB
0	1000101110		40	1000101110		80	1000101110		120	1000101110	
1	1000101110		41	1000101110		81	1000101110		121	1000101110	
2	1000101110		42	1000101110		82	1000101110		122	1000101110	
3	1000101110		43	1000101110		83	1000101110		123	1000101110	
4	1000101110		44	1000101110		84	1000101110		124	1000101110	
5	1000101110		45	1000101110		85	1000101110		125	1000101110	
6	1000101110		46	1000101110		86	1000101110		126	1000101110	
7	1000101110		47	1000101110		87	1000101110		127	1000101110	
8	1000101110		48	1000101110		88	1000101110		128	1000101110	
9	1000101110		49	1000101110		89	1000101110		129	1000101110	
10	1000101110		50	1000101110		90	1000101110		130	1000101110	
11	1000101110		51	1000101110		91	1000101110		131	1000101110	
12	1000101110		52	1000101110		92	1000101110		132	1000101110	
13	1000101110		53	1000101110		93	1000101110		133	1000101110	
14	1000101110		54	1000101110		94	1000101110		134	1000101110	
15	1000101110		55	1000101110		95	1000101110		135	1000101110	
16	1000101110		56	1000101110		96	1000101110		136	1000101110	
17	1000101110		57	1000101110		97	1000101110		137	1000101110	
18	1000101110		58	1000101110		98	1000101110		138	1000101110	
19	1000101110		59	1000101110		99	1000101110		139	1000101110	
20	1000101110		60	1000101110		100	1000101110				
21	1000101110		61	1000101110		101	1000101110				
22	1000101110		62	1000101110		102	1000101110				
23	1000101110		63	1000101110		103	1000101110				
24	1000101110		64	1000101110		104	1000101110				
25	1000101110		65	1000101110		105	1000101110				
26	1000101110		66	1000101110		106	1000101110				
27	1000101110		67	1000101110		107	1000101110				
28	1000101110		68	1000101110		108	1000101110				
29	1000101110		69	1000101110		109	1000101110				
30	1000101110		70	1000101110		110	1000101110				
31	1000101110		71	1000101110		111	1000101110				
32	1000101110		72	1000101110		112	1000101110				
33	1000101110		73	1000101110		113	1000101110				
34	1000101110		74	1000101110		114	1000101110				
35	1000101110		75	1000101110		115	1000101110				
36	1000101110		76	1000101110		116	1000101110				
37	1000101110		77	1000101110		117	1000101110				
38	1000101110		78	1000101110		118	1000101110				
39	1000101110		79	1000101110		119	1000101110				

FIG. 12

ORDER OF RECORDING	CODEWORD		ORDER OF RECORDING	CODEWORD		ORDER OF RECORDING	CODEWORD		ORDER OF RECORDING	CODEWORD	
	MSB	LSB		MSB	LSB		MSB	LSB		MSB	LSB
0	1101110001		40	1000101110		80	0010001110		120	1101110001	
1	1101110001		41	0010001110		81	1101110001		121	1000101110	
2	1101110001		42	0010001110		82	1101110001		122	0010001110	
3	1101110001		43	0010001110		83	1101110001		123	0010001110	
4	1000101110		44	0010001110		84	1101110001		124	0010001110	
5	0010001110		45	1101110001		85	1000101110		125	0010001110	
6	0010001110		46	1101110001		86	0010001110		126	1101110001	
7	0010001110		47	1101110001		87	0010001110		127	1101110001	
8	0010001110		48	1101110001		88	0010001110		128	1101110001	
9	1101110001		49	1000101110		89	0010001110		129	1101110001	
10	1101110001		50	0010001110		90	1101110001		130	1000101110	
11	1101110001		51	0010001110		91	1101110001		131	0010001110	
12	1101110001		52	0010001110		92	1101110001		132	0010001110	
13	1000101110		53	0010001110		93	1101110001		133	0010001110	
14	0010001110		54	1101110001		94	1000101110		134	0010001110	
15	0010001110		55	1101110001		95	0010001110		135	1101110001	
16	0010001110		56	1101110001		96	0010001110		136	1101110001	
17	0010001110		57	1101110001		97	0010001110		137	1101110001	
18	1101110001		58	1000101110		98	0010001110		138	1101110001	
19	1101110001		59	0010001110		99	1101110001		139	1000101110	
20	1101110001		60	0010001110		100	1101110001				
21	1101110001		61	0010001110		101	1101110001				
22	1000101110		62	0010001110		102	1101110001				
23	0010001110		63	1101110001		103	1000101110				
24	0010001110		64	1101110001		104	0010001110				
25	0010001110		65	1101110001		105	0010001110				
26	0010001110		66	1101110001		106	0010001110				
27	1101110001		67	1000101110		107	0010001110				
28	1101110001		68	0010001110		108	1101110001				
29	1101110001		69	0010001110		109	1101110001				
30	1101110001		70	0010001110		110	1101110001				
31	1000101110		71	0010001110		111	1101110001				
32	0010001110		72	1101110001		112	1000101110				
33	0010001110		73	1101110001		113	0010001110				
34	0010001110		74	1101110001		114	0010001110				
35	0010001110		75	1101110001		115	0010001110				
36	1101110001		76	1000101110		116	0010001110				
37	1101110001		77	0010001110		117	1101110001				
38	1101110001		78	0010001110		118	1101110001				
39	1101110001		79	0010001110		119	1101110001				

FIG. 13

ORDER OF RECORDING	CODEWORD		ORDER OF RECORDING	CODEWORD		ORDER OF RECORDING	CODEWORD		ORDER OF RECORDING	CODEWORD	
	MSB	LSB		MSB	LSB		MSB	LSB		MSB	LSB
0	1101110001	1101110001	40	0010001110	0010001110	80	1101110001	1101110001	120	1101110001	1101110001
1	1101110001	1101110001	41	0010001110	0010001110	81	0010001110	0010001110	121	1101110001	1101110001
2	1101110001	1101110001	42	1101110001	1101110001	82	0010001110	0010001110	122	1101110001	1101110001
3	0010001110	0010001110	43	1101110001	1101110001	83	0010001110	0010001110	123	0010001110	0010001110
4	0010001110	0010001110	44	1101110001	1101110001	84	1101110001	1101110001	124	0010001110	0010001110
5	0010001110	0010001110	45	0010001110	0010001110	85	1101110001	1101110001	125	0010001110	0010001110
6	1101110001	1101110001	46	0010001110	0010001110	86	1101110001	1101110001	126	1101110001	1101110001
7	1101110001	1101110001	47	0010001110	0010001110	87	0010001110	0010001110	127	1101110001	1101110001
8	1101110001	1101110001	48	1101110001	1101110001	88	0010001110	0010001110	128	1101110001	1101110001
9	0010001110	0010001110	49	1101110001	1101110001	89	0010001110	0010001110	129	0010001110	0010001110
10	0010001110	0010001110	50	1101110001	1101110001	90	1101110001	1101110001	130	0010001110	0010001110
11	0010001110	0010001110	51	0010001110	0010001110	91	1101110001	1101110001	131	0010001110	0010001110
12	1101110001	1101110001	52	0010001110	0010001110	92	1101110001	1101110001	132	1101110001	1101110001
13	1101110001	1101110001	53	0010001110	0010001110	93	0010001110	0010001110	133	1101110001	1101110001
14	1101110001	1101110001	54	1101110001	1101110001	94	0010001110	0010001110	134	1101110001	1101110001
15	0010001110	0010001110	55	1101110001	1101110001	95	0010001110	0010001110	135	0010001110	0010001110
16	0010001110	0010001110	56	1101110001	1101110001	96	1101110001	1101110001	136	0010001110	0010001110
17	0010001110	0010001110	57	0010001110	0010001110	97	1101110001	1101110001	137	0010001110	0010001110
18	1101110001	1101110001	58	0010001110	0010001110	98	1101110001	1101110001	138	1101110001	1101110001
19	1101110001	1101110001	59	0010001110	0010001110	99	0010001110	0010001110	139	1101110001	1101110001
20	1101110001	1101110001	60	1101110001	1101110001	100	0010001110	0010001110			
21	0010001110	0010001110	61	1101110001	1101110001	101	0010001110	0010001110			
22	0010001110	0010001110	62	1101110001	1101110001	102	1101110001	1101110001			
23	0010001110	0010001110	63	0010001110	0010001110	103	1101110001	1101110001			
24	1101110001	1101110001	64	0010001110	0010001110	104	1101110001	1101110001			
25	1101110001	1101110001	65	0010001110	0010001110	105	0010001110	0010001110			
26	1101110001	1101110001	66	1101110001	1101110001	106	0010001110	0010001110			
27	0010001110	0010001110	67	1101110001	1101110001	107	0010001110	0010001110			
28	0010001110	0010001110	68	1101110001	1101110001	108	1101110001	1101110001			
29	0010001110	0010001110	69	0010001110	0010001110	109	1101110001	1101110001			
30	1101110001	1101110001	70	0010001110	0010001110	110	1101110001	1101110001			
31	1101110001	1101110001	71	0010001110	0010001110	111	0010001110	0010001110			
32	1101110001	1101110001	72	1101110001	1101110001	112	0010001110	0010001110			
33	0010001110	0010001110	73	1101110001	1101110001	113	0010001110	0010001110			
34	0010001110	0010001110	74	1101110001	1101110001	114	1101110001	1101110001			
35	0010001110	0010001110	75	0010001110	0010001110	115	1101110001	1101110001			
36	1101110001	1101110001	76	0010001110	0010001110	116	1101110001	1101110001			
37	1101110001	1101110001	77	0010001110	0010001110	117	0010001110	0010001110			
38	1101110001	1101110001	78	1101110001	1101110001	118	0010001110	0010001110			
39	0010001110	0010001110	79	1101110001	1101110001	119	0010001110	0010001110			

FIG. 14

ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB
0	0010011101	40	0101011001	80	0101101001	120	0010011101	160	0110010101
1	0101010101	41	0110100101	81	0010011101	121	0110100101	161	0110100101
2	0101010101	42	0010011101	82	0101100101	122	0101100101	162	0010011101
3	0010011101	43	0101011001	83	0101100101	123	0010011101	163	0110010101
4	0101010101	44	0110010101	84	0010011101	124	0110100101	164	0110010101
5	0101011001	45	0010011101	85	0101100101	125	0101011001	165	0010011101
6	0010011101	46	0101011001	86	0110101001	126	0010011101	166	0110010101
7	0101010101	47	0110011001	87	0010011101	127	0110100101	167	0110011001
8	0101101001	48	0010011101	88	0101100101	128	0101101001	168	0010011101
9	0010011101	49	0101010101	89	0110100101	129	0010011101	169	0110011001
10	0101010101	50	0101010101	90	0010011101	130	0110100101	170	0101010101
11	0101100101	51	0010011101	91	0101100101	131	0101100101	171	0010011101
12	0010011101	52	0101101001	92	0110010101	132	0010011101	172	0110011001
13	0101010101	53	0101011001	93	0010011101	133	0110100101	173	0101011001
14	0110101001	54	0010011101	94	0101100101	134	0110101001	174	0010011101
15	0010011101	55	0101101001	95	0110011001	135	0010011101	175	0110011001
16	0101010101	56	0101101001	96	0010011101	136	0110100101	176	0101101001
17	0110100101	57	0010011101	97	0110101001	137	0110100101	177	0010011101
18	0010011101	58	0101101001	98	0101010101	138	0010011101	178	0110011001
19	0101010101	59	0101001001	99	0010011101	139	0110100101	179	0110011001
20	0110010101	60	0010011101	100	0110011001	140	0110010101	180	0010011101
21	0010011101	61	0101101001	101	0101011001	141	0010011101	181	0110011001
22	0101010101	62	0110101001	102	0010011101	142	0110100101	182	0110101001
23	0110011001	63	0010011101	103	0110101001	143	0110011001		
24	0010011101	64	0101101001	104	0101101001	144	0010011101		
25	0101011001	65	0110100101	105	0010011101	145	0110010101		
26	0101010101	66	0010011101	106	0110101001	146	0101010101		
27	0010011101	67	0101101001	107	0101100101	147	0010011101		
28	0101011001	68	0110010101	108	0010011101	148	0110010101		
29	0101011001	69	0010011101	109	0110101001	149	0101011001		
30	0010011101	70	0101101001	110	0010011101	150	0010011101		
31	0101011001	71	0110011001	111	0010011101	151	0110010101		
32	0101010101	72	0010011101	112	0110101001	152	0101101001		
33	0010011101	73	0101100101	113	0110100101	153	0010011101		
34	0101011001	74	0101010101	114	0010011101	154	0110010101		
35	0101100101	75	0010011101	115	0110101001	155	0101100101		
36	0100011101	76	0101100101	116	0110010101	156	0010011101		
37	0101011001	77	0101011001	117	0010011101	157	0110010101		
38	0110101001	78	0010011101	118	0110101001	158	0110101001		
39	0010011101	79	0101100101	119	0110011001	159	0010011101		

FIG. 15

ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB
0	0111001000	40	0101011011	80	0101101001	120	0111001000	160	0110010111
1	1010101000	41	0110100111	81	0111001000	121	0110100111	161	0110100101
2	1010101000	42	1000110111	82	1010011000	122	0101010111	162	0111001000
3	0111001000	43	0101011011	83	1010011000	123	1000110111	163	1001101000
4	0101010111	44	0110010101	84	0111001000	124	0110100111	164	1001101000
5	0101010111	45	0110010101	85	0101100111	125	0101010001	165	0111001000
6	1000110111	46	1010101000	86	0110101011	126	0111001000	166	0110010111
7	0101010111	47	1001101000	87	1000110111	127	1001011000	167	0110010111
8	0101101001	48	0111001000	88	0101100111	128	1010010100	168	1000110111
9	0111001000	49	0101010111	89	0110100101	129	0111001000	169	0110011011
10	1010101000	50	0101010111	90	0111001000	130	0110100111	170	0101010101
11	1010011000	51	1000110111	91	1010011000	131	0101100111	171	0111001000
12	0111001000	52	0101101011	92	1001101000	132	1000110111	172	1001100100
13	0101010111	53	0101011001	93	0111001000	133	0110011011	173	1010100100
14	0110101011	54	0111001000	94	0101100111	134	0110101001	174	0111001000
15	1000110111	55	1010010100	95	0110011011	135	0111001000	175	0110011011
16	0101010111	56	1010010100	96	1000110111	136	1001011000	176	0101101011
17	0110101001	57	0111001000	97	0110101011	137	1001011000	177	1000110111
18	0111001000	58	0101010111	98	0101010101	138	0111001000	178	0110011011
19	1010101000	59	0101011011	99	0111001000	139	0110010111	179	0101100101
20	1010101000	60	1000110111	100	1001010100	140	0110010111	180	0111001000
21	1001101000	61	0101010111	101	1010100100	141	1000110111	181	1001100100
22	0111001000	62	0110101001	102	0111001000	142	0110100111	182	1001010100
23	0110011011	63	0111001000	103	0110101011	143	0110011001		
24	1000110111	64	1010010100	104	0101101011	144	0111001000		
25	0101010111	65	1001011000	105	1000110111	145	1001101000		
26	0101010101	66	0111001000	106	0101010111	146	1010101000		
27	0111001000	67	0101010111	107	0101100101	147	0111001000		
28	1010101000	68	0110010111	108	0111001000	148	0110010111		
29	1010101000	69	1000110111	109	1001010100	149	1000110111		
30	0111001000	70	0101010111	110	1001010100	150	1000110111		
31	0101010101	71	0110011001	111	0111001000	151	0101010001		
32	0101101011	72	0111001000	112	0110101011	152	0101101001		
33	1000110111	73	1010011000	113	0110100111	153	0111001000		
34	0101011011	74	1010101000	114	1000110111	154	1001101000		
35	0101100101	75	0111001000	115	0110101011	155	1010011000		
36	0111001000	76	0101100111	116	0110010101	156	0111001000		
37	1010100100	77	0101010111	117	0111001000	157	0110010111		
38	1001010100	78	1000110111	118	1001010100	158	0110101011		
39	0111001000	79	0101100111	119	1001100100	159	1000110111		

FIG. 16

ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB
0	1000110111	40	0101011011	80	1010010100	120	1000110111	160	0110010111
1	1010101000	41	0110100111	81	0111001000	121	1001011000	161	0110100111
2	1010101000	42	1000110111	82	0101100111	122	1010101000	162	1000110111
3	0111001000	43	1010100100	83	0101101011	123	0111001000	163	1001101000
4	0101010111	44	1001101000	84	1000110111	124	0110100111	164	1001101000
5	0101010111	45	0111001000	85	1010011000	125	0101010111	165	0111001000
6	1000110111	46	0101010111	86	1001010100	126	1000110111	166	0110010111
7	1010101000	47	0110010111	87	0111001000	127	1001011000	167	0110010111
8	1010010100	48	1000110111	88	0101100111	128	1010010100	168	1000110111
9	0111001000	49	1010010100	89	0110100111	129	0111001000	169	1001100100
10	0101010111	50	1010101000	90	1000110111	130	0110100111	170	1010101000
11	0101100111	51	0111001000	91	1010011000	131	0101100111	171	0111001000
12	1000110111	52	0101010111	92	1001101000	132	1000110111	172	0110010111
13	1010101000	53	0101010111	93	0111001000	133	1001011000	173	0101010111
14	1001010100	54	1000110111	94	0101100111	134	1001010100	174	1000110111
15	0111001000	55	1010010100	95	0110010111	135	0111001000	175	1001100100
16	0101010111	56	1010010100	96	1000110111	136	0110100111	176	1010010100
17	0110100111	57	0111001000	97	1001010100	137	0110100111	177	0111001000
18	1000110111	58	0101101011	98	1010101000	138	1000110111	178	0110010111
19	1010101000	59	0101100111	99	0111001000	139	1001011000	179	0101100111
20	1001101000	60	1000110111	100	0110101011	140	1001101000	180	1000110111
21	0111001000	61	1010010100	101	0101011011	141	0111001000	181	1001100100
22	0101010111	62	1001010100	102	1000110111	142	0110100111	182	1001010100
23	0110010111	63	0111001000	103	1001010100	143	0110010111		
24	1000110111	64	0101010111	104	1010010100	144	1000110111		
25	1010100100	65	0110100111	105	0111001000	145	1001101000		
26	1010101000	66	1000110111	106	0110101011	146	1010101000		
27	0111001000	67	1000110111	107	0101001011	147	0111001000		
28	0101010111	68	1001101000	108	1000110111	148	0110010111		
29	0101010111	69	0111001000	109	1001010100	149	0101011011		
30	1000110111	70	0101101011	110	1001010100	150	1000110111		
31	1010100100	71	0110010111	111	0111001000	151	1001101000		
32	1010010100	72	1000110111	112	0110101011	152	1010010100		
33	0111001000	73	1010011000	113	0110100111	153	0111001000		
34	0101010111	74	1010101000	114	1000110111	154	0110010111		
35	0101100111	75	0111001000	115	1001010100	155	0101100111		
36	1000110111	76	0101100111	116	1001101000	156	1000110111		
37	1010100100	77	0101011011	117	0111001000	157	1001101000		
38	1001010100	78	1000110111	118	0110101011	158	1001010100		
39	0111001000	79	1010011000	119	0110010111	159	0111001000		

FIG. 19

APT ₂	APT ₁	APT ₀	MEANING
0	0	0	CONSUMER DIGITAL VCR
0	0	1	RESERVED
0	1	0	RESERVED
0	1	1	RESERVED
1	0	0	RESERVED
1	0	1	RESERVED
1	1	0	RESERVED
1	1	1	NO INFORMATION

FIG. 20

ORDER OF RECORDING	CODEWORD	
	MSB	LSB
0	0010011101	
1	0110011001	
2	0110010101	
3	0010011101	
4	0110011001	
5	0110010101	
6	0010011101	
7	0110011001	
8	0110010101	

FIG. 21

ORDER OF RECORDING	CODEWORD	
	MSB	LSB
0	0	1
1	0	1
2	0	1
3	1	0
4	0	1
5	0	1
6	0	1
7	1	0
8	1	0

FIG. 22

ORDER OF RECORDING	CODEWORD	
	MSB	LSB
0	0	1
1	0	1
2	0	1
3	1	0
4	1	0
5	1	0
6	0	1
7	0	1
8	0	1

FIG. 23

ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB
0	1000101110	10	1000101110	20	1000101110
1	1000101110	11	1000101110	21	1000101110
2	1000101110	12	1000101110	22	1000101110
3	1000101110	13	1000101110	23	1000101110
4	1000101110	14	1000101110	24	1000101110
5	1000101110	15	1000101110	25	1000101110
6	1000101110	16	1000101110	26	1000101110
7	1000101110	17	1000101110	27	1000101110
8	1000101110	18	1000101110		
9	1000101110	19	1000101110		

FIG. 24

ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB
0	0010001110	10	1101110001	20	1101110001
1	1101110001	11	1101110001	21	1101110001
2	1101110001	12	1101110001	22	1101110001
3	1101110001	13	1101110001	23	1000101110
4	1101110001	14	1000101110	24	0010001110
5	1000101110	15	0010001110	25	0010001110
6	0010001110	16	0010001110	26	0010001110
7	0010001110	17	0010001110	27	0010001110
8	0010001110	18	0010001110		
9	0010001110	19	1101110001		

FIG. 25

ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB	ORDER OF RECORDING	CODEWORD MSB LSB
0	1101110001	10	1101110001	20	0010001110
1	0010001110	11	1101110001	21	0010001110
2	0010001110	12	1101110001	22	1101110001
3	0010001110	13	0010001110	23	1101110001
4	1101110001	14	0010001110	24	1101110001
5	1101110001	15	0010001110	25	0010001110
6	1101110001	16	1101110001	26	0010001110
7	0010001110	17	1101110001	27	0010001110
8	0010001110	18	1101110001		
9	0010001110	19	0010001110		

FIG. 26

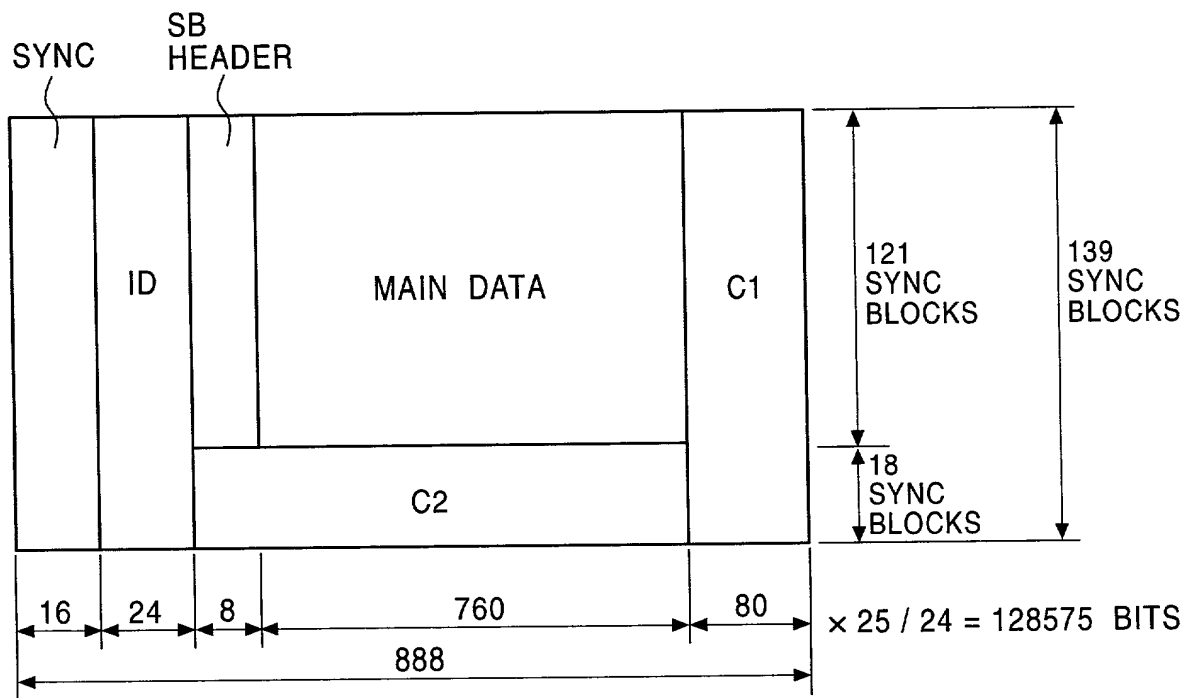


FIG. 27

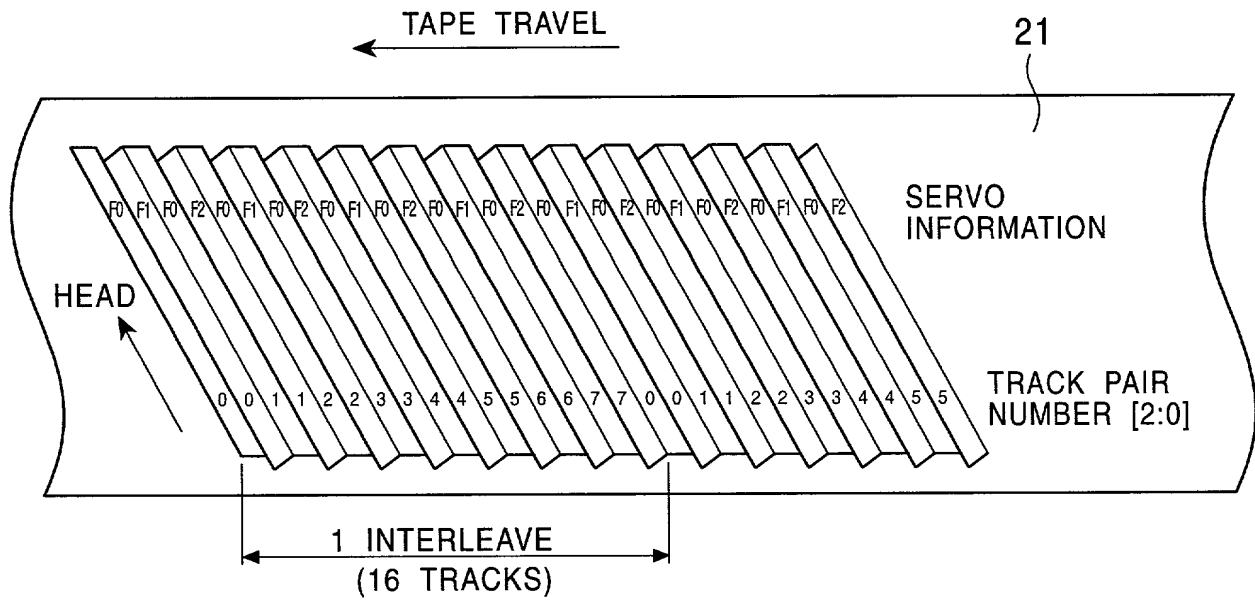


FIG. 28

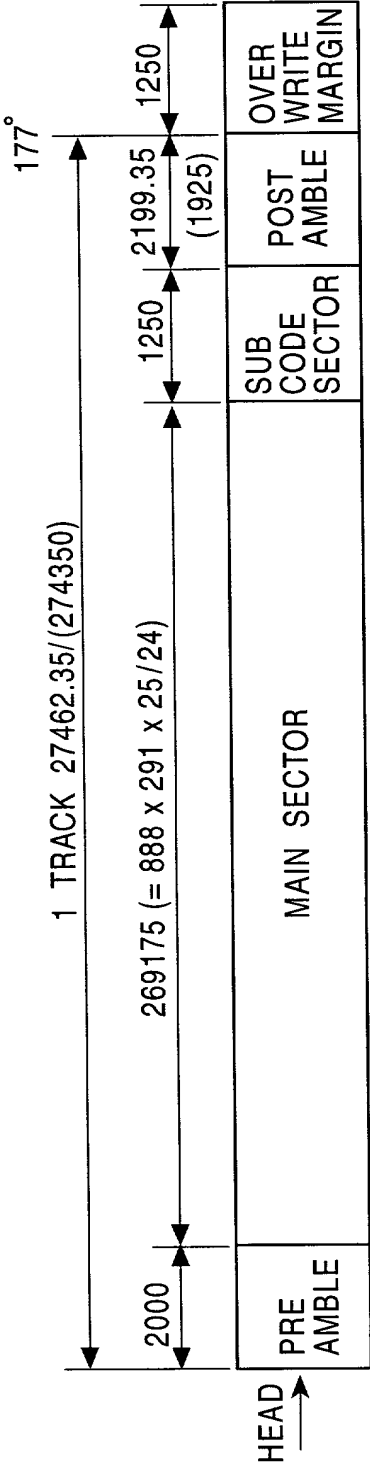


FIG. 29

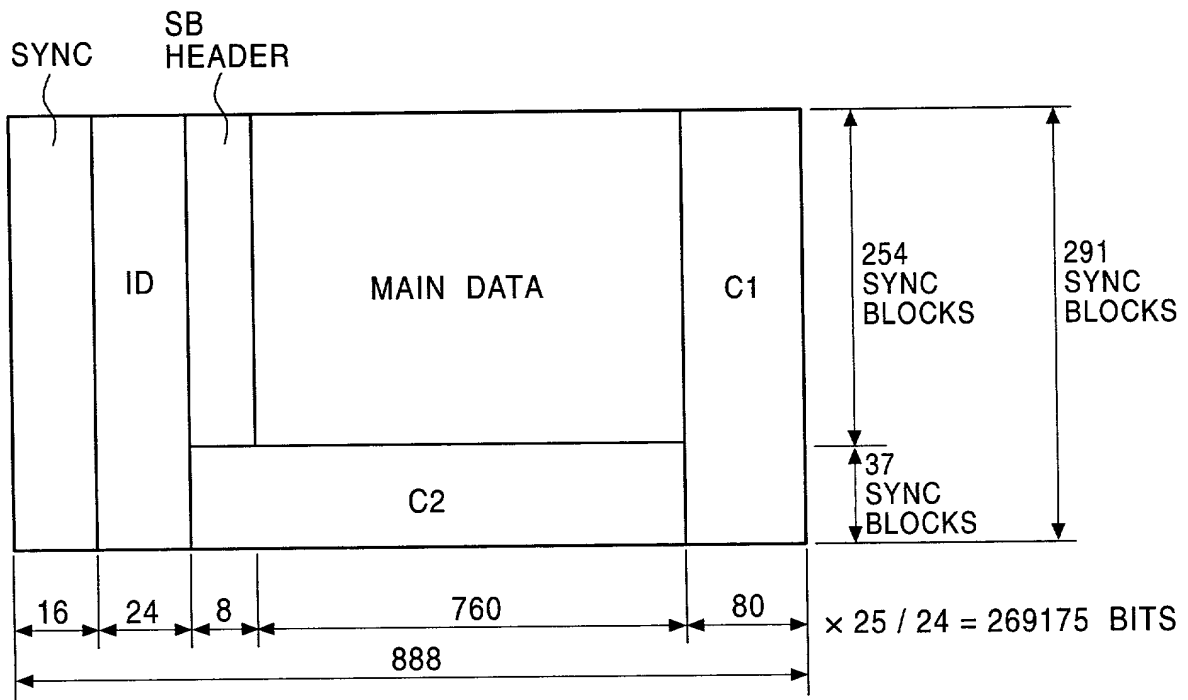


FIG. 30

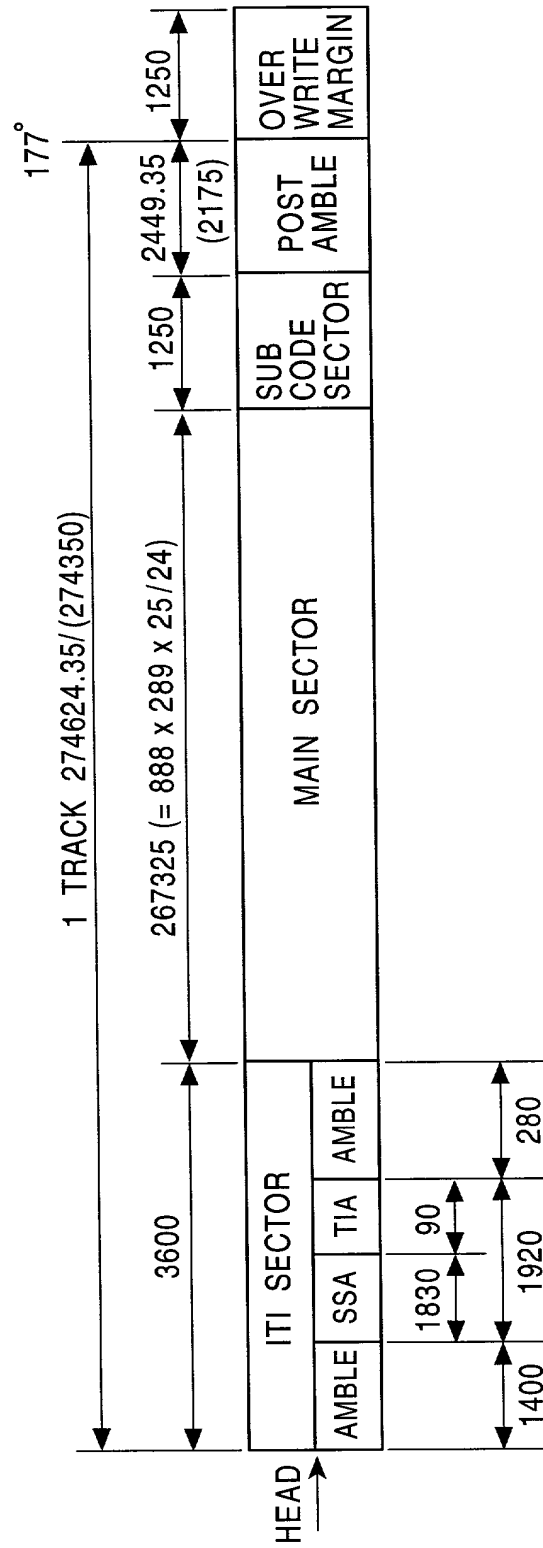


FIG. 31

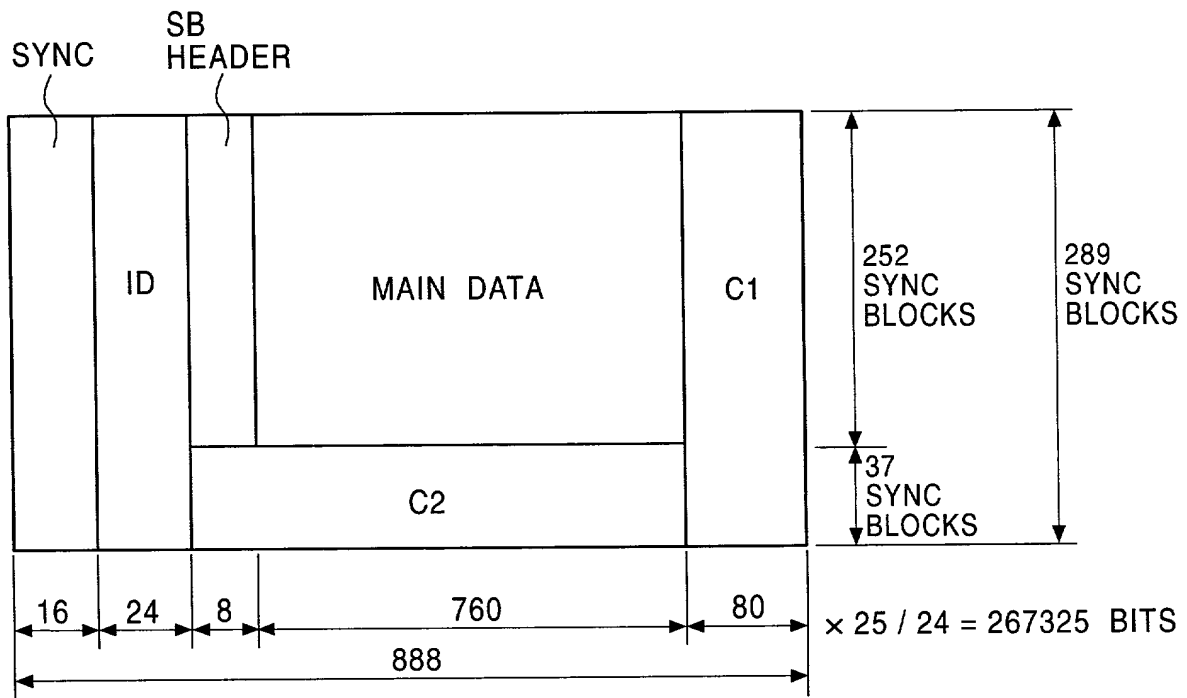


FIG. 32

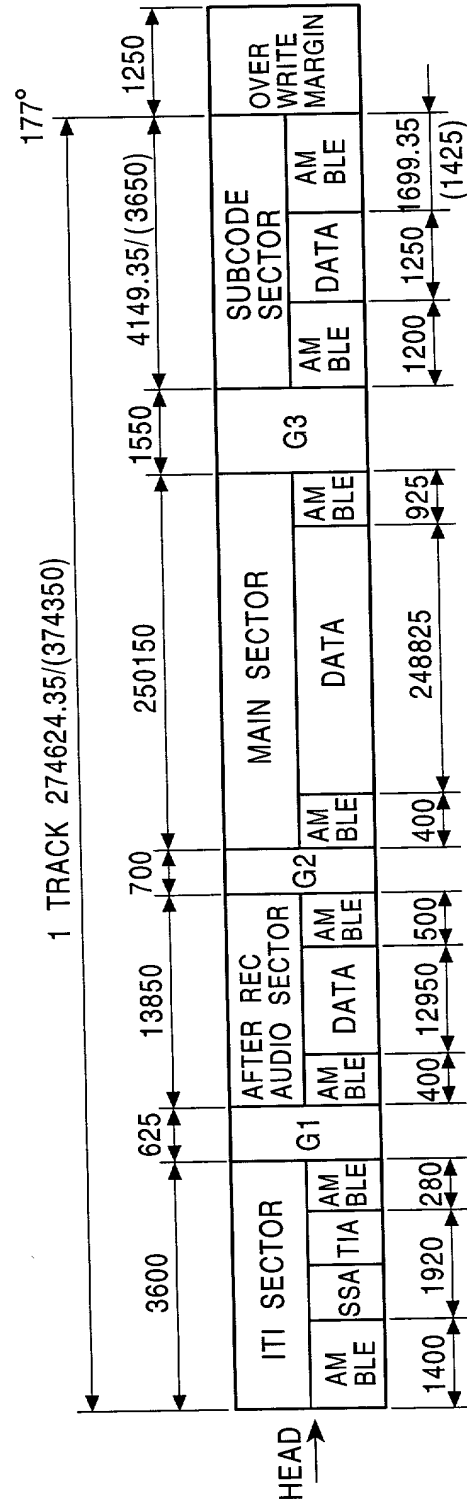


FIG. 33

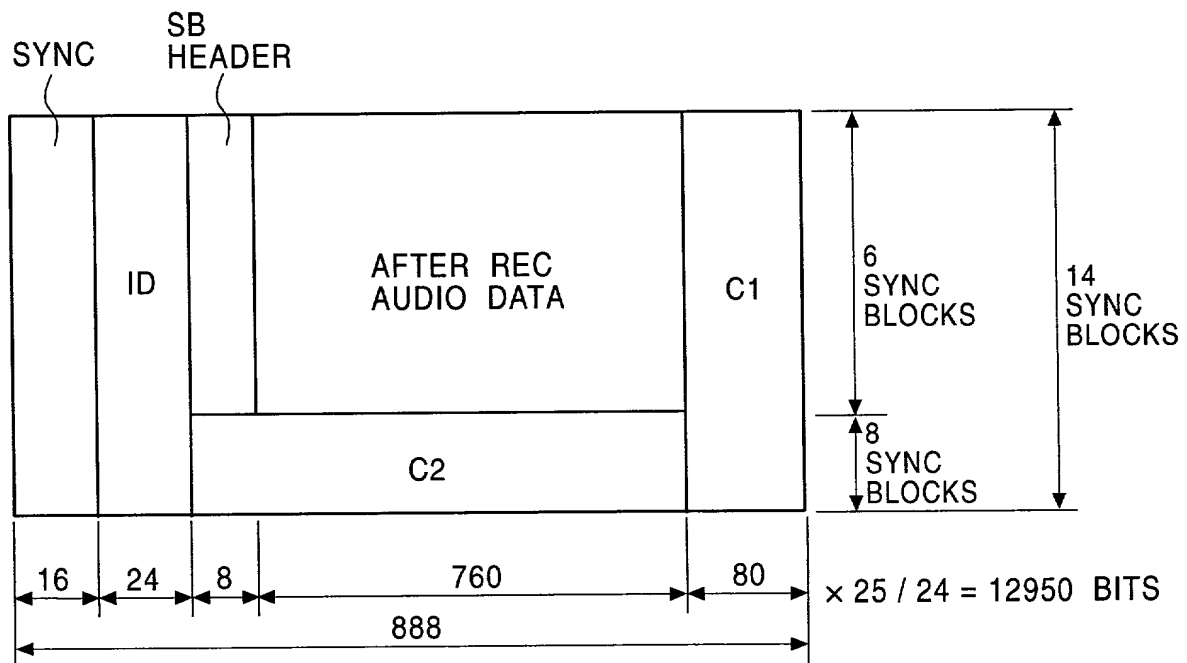


FIG. 34

